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IN THE US PATENT AND TRADEMARK OFFICE

June 17, 2005

Applicants: Junghoon Lee et al.

Title : THIN MEMBRANE TRANSDUCER

Serial No.: 10/723,307

Examiner: C. Mack

Filed : Nov. 26, 2003

Confirmation No. 6841

Group: 2855

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

RESPONSE TO OFFICE ACTION

Dear Sir:

Please amend the above application as follows:

The examiner cites the '796 patent but fails to recognize that this patent discloses a gas pressure microsensor wherein gas pressure in the microcavity 24 within the membrane 20 is sensed. In contrast to the examiner's allegation, the bowed membrane 20 of the '796 patent is formed by epitaxially growing a p-GaN layer 12 and etching an underlying n-GaN base layer 13 in much the same manner as the deficient '730 patent.

The layers 26a, 26b of the '796 patent form a piezoelectric strain sensor on the membrane 20. There is no disclosure whatsoever in the '796 patent of Applicants' method of claim 27 involving heating a membrane to impart an arcuate shape thereto, depositing one more metallic layers on the heated membrane, and cooling the membrane to ambient temperature, the membrane being constrained by the one or more metallic layers in an arcuate shape.

Neither the '730 patent nor the '796 patent alone or together suggest Applicants' claim 27.


Reconsideration of the rejection of claims 18, 20, 26, and 27 is requested.

Applicants have added new claim 28 which is believed to be allowable as well. The Commissioner is authorized to charge the fee for new claim 28 to my deposit account No. 20-1124.

USSN 10/723,307

Applicants believe the pending claims are in condition for allowance, and action to that end is requested.

Respectfully submitted,



Edward J. Timmer  
Reg. No. 27 402

Enclosure: Post Card

Telephone: 269-629-9136

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service under 37 CFR 1.8 as first class mail in an envelope addressed to: Commissioner For Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on June 20, 2005.



Edward J. Timmer

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b>						Application or Docket Number <b>10-723,307</b>					
Substitute for Form PTO-875											
<b>APPLICATION AS FILED – PART I</b>				<b>SMALL ENTITY</b>		<b>OR</b>		<b>OTHER THAN SMALL ENTITY</b>			
(Column 1)		(Column 2)									
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)	FEE (\$)			RATE (\$)	FEE (\$)		
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A				N/A			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A				N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A				N/A			
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	•		X	=	OR		X	=		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	•		X	=	OR		X	=		
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).					OR					
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				N/A		OR		N/A			
				TOTAL		OR		TOTAL			
<p>* If the difference in column 1 is less than zero, enter "0" in column 2.</p>											
<b>APPLICATION AS AMENDED – PART II</b>						<b>SMALL ENTITY</b>		<b>OR</b>		<b>OTHER THAN SMALL ENTITY</b>	
(Column 1)		(Column 2)		(Column 3)							
<b>AMENDMENT A</b>	6-22-05	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	• 28	Minus	• 27	= 1	X 15 <sup>00</sup>	= 15 <sup>00</sup>	OR		X	=
	Independent (37 CFR 1.16(h))	• 9	Minus	• 9	= -	X	=	OR		X	=
	Application Size Fee (37 CFR 1.16(s))							OR			
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR		N/A	
						TOTAL ADD'L FEE	25 <sup>00</sup> Pd.	OR		TOTAL ADD'L FEE	
<b>AMENDMENT B</b>		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(j))	•	Minus	•	=	X	=	OR		X	=
	Independent (37 CFR 1.16(h))	•	Minus	•	=	X	=	OR		X	=
	Application Size Fee (37 CFR 1.16(s))							OR			
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					N/A		OR		N/A	
						TOTAL ADD'L FEE		OR		TOTAL ADD'L FEE	
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.          ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".          *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".          The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>											

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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